



ETA-Danmark A/S
Göteborg Plads 1
DK-2150 Nordhavn
Tel. +45 72 24 59 00
Fax +45 72 24 59 04
Internet www.etadanmark.dk

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to Article 29 of the Regulation (EU)
No 305/2011 of the European
Parliament and of the Council of 9
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MEMBER OF EOTA



European Technical Assessment ETA-15/0121 of 14/04/2015

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the construction product:

BLÜCHER Fire Proof Water Trap type 502.052.110 FS and 562.002.000 FS

Product family to which the above construction product belongs:

Fire proof water trap with intumescent fire seal (combined with a stainless steel floor gully penetration)

Manufacturer:

Blücher Metal A/S
Pugdølvej 1
DK-7480 Vildbjerg
Tel. +45 9992 0800
Internet www.blucher.com

Manufacturing plant:

Blücher Metal A/S
Pugdølvej 1
DK-7480 Vildbjerg

This European Technical Assessment contains:

13 pages including 3 annexes which form an integral part of the document

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of:

European Assessment Document (EAD) no. 350134-00-11.04 for Fire proof water trap with intumescent fire seal (combined with a stainless steel floor gully penetration), edition 2014-10

This version replaces:

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

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II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

1 Technical description of product and intended use

Technical description of the product

The fire proof water trap is to be installed in a stainless steel floor gully penetration. The water trap comes with an intumescent paste which will expand in case of fire and seal the penetration in the fire classified building element, ensuring that the fire resistance of the building element is maintained. The trap is delivered in different sizes for different gullies. The products have the designations Fire Proof Water Trap type 502.052.110 FS and 562.002.000 FS. See drawings in annex 1.

The fire proof trap are installed in type BLÜCHER Domestic, BLÜCHER Domestic 390 and BLÜCHER Industrial gullies specified in annex 3, in accordance with EN 1253 and complies with the requirements for the designated loading class in accordance with the standard.

The floor gully is delivered as a one-part gully or a two-part gully.

The one-part gully consist of one main part, onto which the grating is mounted directly. The one-part gully has a fixed height.

The two-part gully consists of two main parts – a lower and an upper part. The upper part can slide within the lower part, resulting in a gully with adjustable height. A rubber seal is installed between the upper and lower part to secure the water tightness of the gully. The grating is mounted on the upper part of the gully.

Regardless of the gully principle, the trap is the same.

The intumescent material is placed inside the fire proof water trap and is not in contact with the watertight covering or with the water, sees drawing in annex 1. The intumescent material is highlighted on the drawing.

The intumescent material has the following technical

characteristics:

Characteristic	Value
Density	approx. 1300 kg/m ³
Expansion ratio	12 – 23,5 times at 450°C for 30 minutes
Expansion pressure (300°C)	0,24 to 0,85 N/mm ²
Start temperature reaction	up to 150°C
Loss of mass	57% - 67 % at 450°C for 30 minutes

2 Specification of the intended use in accordance with the applicable EAD

The floor gully with the fire proof trap is intended for use as components with a fire protection effect in rigid floors made from concrete, or aerated concrete that are subject to requirements related to fire protection.

The fire resistant capability prevents heat transmission and fire spreading in the event of fire.

The verification and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of at least 25 years for floor gullies.

The indications given on the working life cannot be interpreted as a guarantee given by the manufacturer, but are to be regarded only as a means for choosing the right product in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for its assessment

Characteristic	Assessment of characteristic
3.2 Safety in case of fire (BWR2)	
Reaction to fire	The gully and trap are made from stainless steel classified as Euroclass A1 in accordance with EN 1350-1 and EC decision 96/603/EC, amended by EC Decision 2000/605/EC
Resistance to fire	The intumescent paste is classified as Euroclass F in accordance with EN 13501-1 The classification and related field of application for each of the combinations of floor gully and fire proof water trap are described in annex 3 in accordance with EN 13501-2
3.3 Hygiene, health and the environment (BWR3)	
Influence on air quality	The product does not contain/release dangerous substances specified in TR 034, dated March 2012 0**)
3.7 Sustainable use of natural resources (BWR7)	
	No Performance Determined

*) In addition to the specific clauses relating to dangerous substances contained in this European technical Assessment, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Regulation, these requirements need also to be complied with, when and where they apply.

3.9 General aspects

The verification of durability is part of testing the essential characteristics. The floor gully with the fire proof water trap type BLÜCHER Domestic, BLÜCHER Domestic 390 and BLÜCHER Industrial may be used in end-use applications according to the provisions for use category Z₁ (indoor applications)..

4 Attestation and verification of constancy of performance (AVCP)

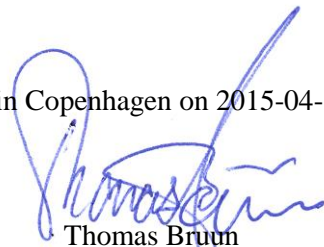
4.1 AVCP system

According to the decision 1999/454/EC of the European Commission, as amended, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) is 1.

5 Technical details necessary for the implementation of the AVCP system, as foreseen in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark

Issued in Copenhagen on 2015-04-14 by



Thomas Bruun
Managing Director, ETA-Danmark

Annex 1
Product details and definitions

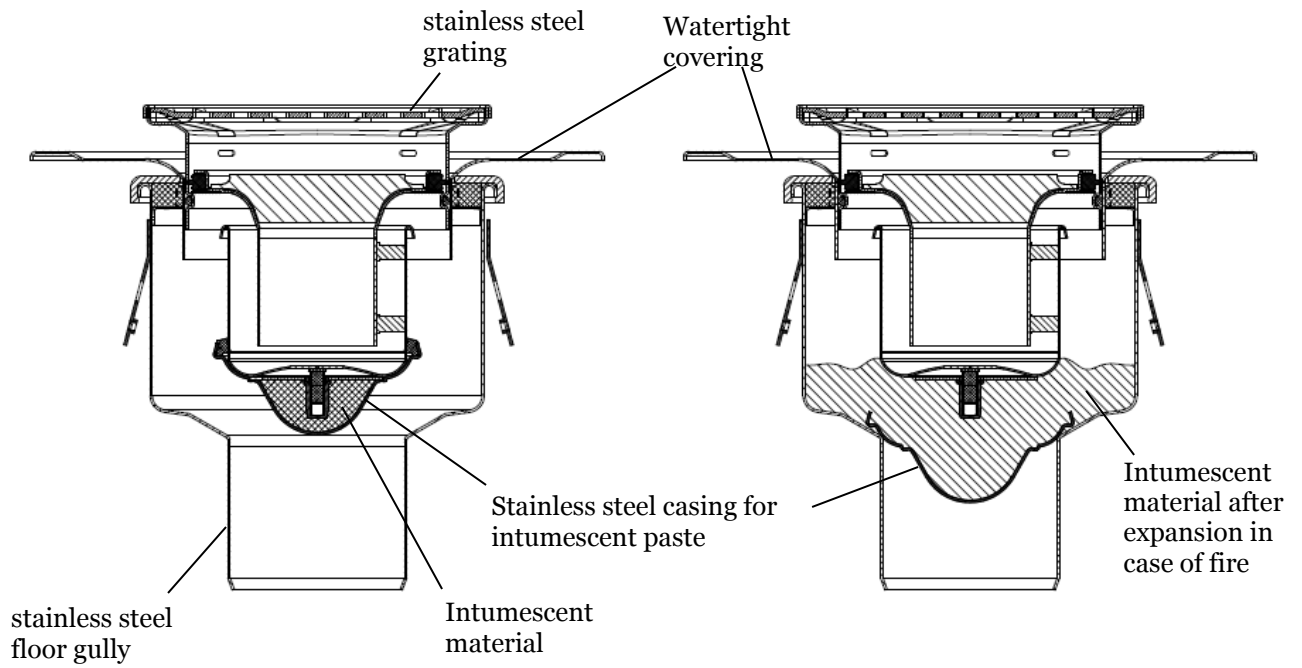


Figure 1. Overall principle of the floor gully with the fire proof trap

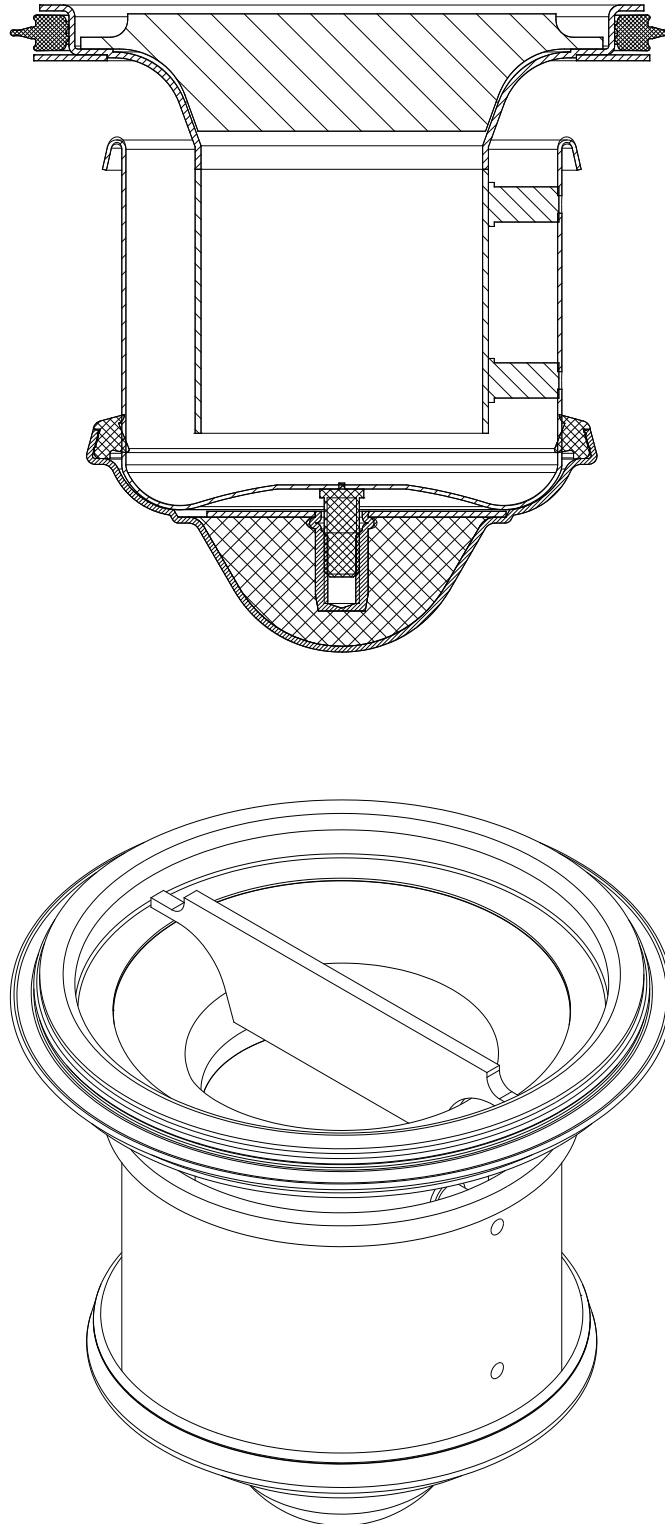


Figure 2: Fire Proof Water Trap: 502.052.110 FS
For dimensions: See table in annex 3

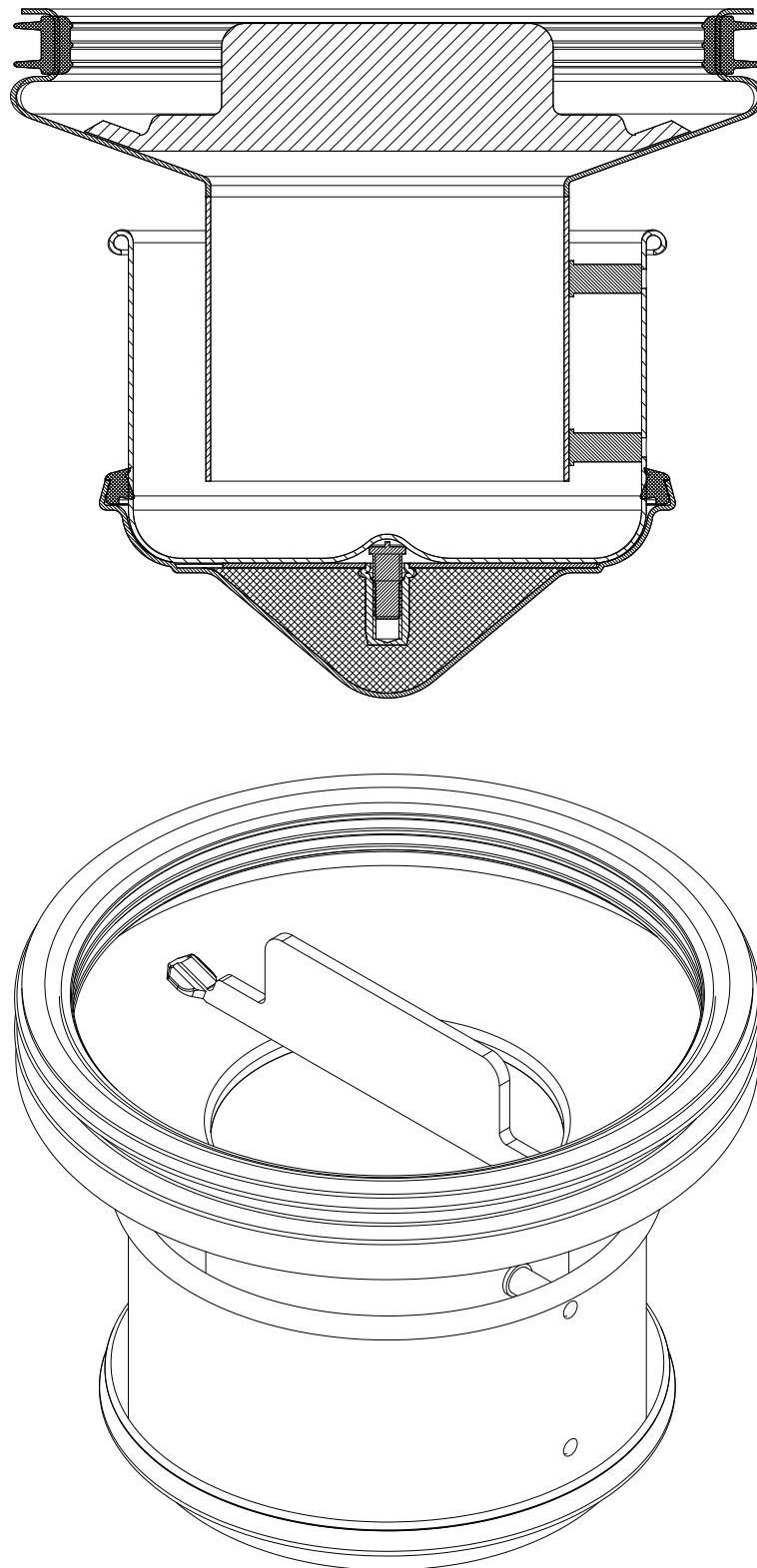
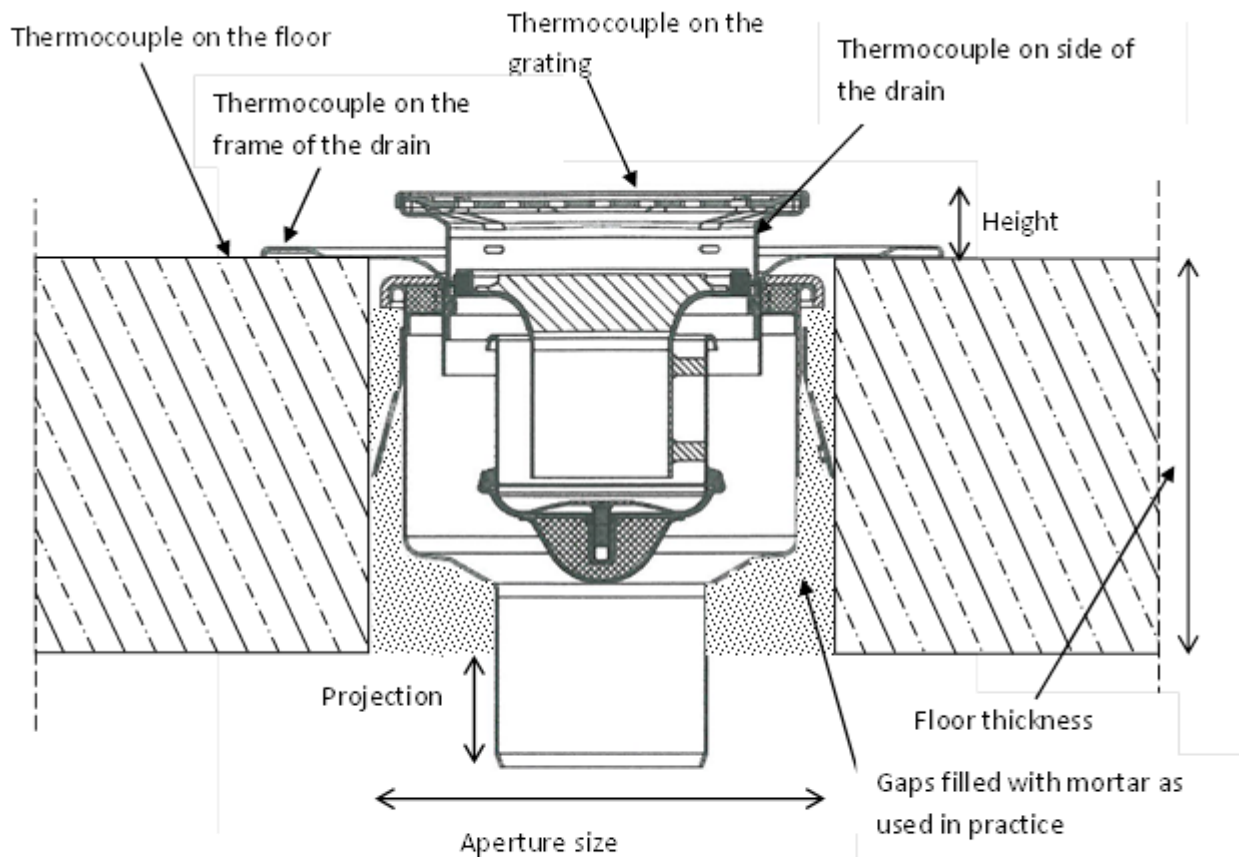


Figure 3: Fire Proof Water Trap: 562.002.000 FS
For dimensions: See table in annex 3

Annex 2
Detailed information for the confirmation of fire resistance



Two test specimen: one drain shall be connected to a straight metal pipe with a minimum length of 500 mm with a capped pipe end and one drain shall be tested without connection.

Annex 3

Resistance to fire classification and field of application

See the following tables for the resistance to fire classes.

Field of application

The classifications are valid for the combinations of the fire proof water trap and floor gullies as shown in the above tables in accordance with the following rules:

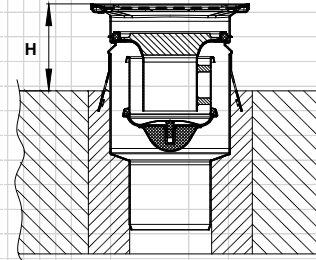
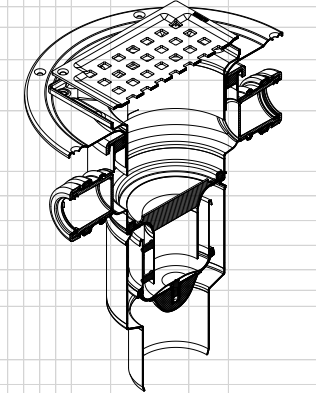
- The floor gullies can be installed in rigid floors with thickness minimum 150 mm and density minimum 650 kg/m³
- Pipes installed at the outlet of the floor gully can of diameter 75 mm or 110 mm depending on the actual floor gully or lower, as shown in the tables above
- The installation height, H, as shown in the tables above is a minimum value. An increase in installation height is allowed
- The frame geometry can be square (for concrete or tiled floors), round (for vinyl and epoxy floors) or triangle (for concrete or tiled floors) as shown in the table above
- Flanges on the floor gully must be covered by concrete with a minimum thickness of 10 mm
- The perforation pattern of the grating is insignificant for the classification and may vary
- The floor gully types 360.200.xxx and 361.200.xxx (Blücher Domestic) are two-part floor gullies, but the upper and lower parts are directly connected to each other, without any rubber seal between the parts. This result in a gully with a geometry that is compared to the one-part gully types 260.300.xxx and 261.300.xxx. These gullies have classification as the one-part gullies
- The gully types 260.200.xxx and 261.200.xxx (Blücher Domestic) are meant to be combined with the frame/gratings shown in table 3 (designated S-0414-214 Mounting sets) and optionally also a flange piece:
 - If the frame/gratings in table 3 are used directly without a flange piece, the result will be a one-part gully equal to the 260.300.xxx and 261.300.xxx series. These gullies have classification as the one-part gullies, except for the frame/grating type 620.200.003 designated “Epoxy”. This frame includes a rubber seal and the classification for this gully follows the two-part drains.
 - If the frame/gratings in table 3 are used together with a flange piece, the result will be a two-part gully comparable to the 250.300.xxx and 151.300.xxx series. These gullies have classification as two-part gullies
- Combinations of parts within the tables that are not marked with the colour green, blue or yellow are not applicable
- The minimum separating distance between multiple floor gullies must be 200 mm measured from the edge of the apertures.

BLÜCHER® Drain Domestic with fire water trap

Tested according to EN 1366-3 and classified according to EN 13501-2

BLÜCHER® Drain Domestic

Frame type	Outlet dimension	1-Part drains				Adjustable drains															
		Type 160	Type 161	Type 260	Type 261	150.000.050	150.000.075	151.000.050	151.000.075	151.003.050	151.003.075	360.000.050	360.000.075	361.000.050	361.000.075	260.200.050	260.200.075	261.200.050	261.200.075		
	Ø50	160.300.050																			
	Ø75	160.300.075	161.300.075																		
	Ø50			260.300.050																	
	Ø75			260.300.075	261.300.075																
	Ø50					150.300.050	150.300.075	151.300.050	151.300.075			360.300.050	360.300.075	361.300.075							
	Ø75					350.300.050	350.300.075	351.300.050	351.300.075												
	Ø50																				
	Ø75																				
	Non	326.300.000				150.300.050	150.300.075	151.300.050	151.300.075			360.300.050	360.300.075	361.300.075							
		325.300.000				350.300.050	350.300.075	351.300.050	351.300.075												
	Non	326.300.000																			
		325.300.000																			
	Non	620.300.039																			
		HB.473				350.320.050	350.320.075														
	Non	326.300.000				250.300.050	250.300.075														
		325.300.000																			
	Non	326.003.000																			
		HB.438					350.360.075		351.360.075												
	Non	326.003.000																			
		HB.438					352.360.075		353.360.075												
	Non	326.003.000																			
		HB.438																			
	Non	326.003.000																			
		HB.438																			
	Non	326.300.000																			
		325.300.000																			
	Non	620.300.039																			
		HB.473																			
Mounting sets See page S/0414-214	Non																				
						250.200.050	250.200.075		251.200.075						260.200.075						
							250.260.075														



Fire classes and installation heights = H:

	10mm	80mm
Blue	EI 120	EI 120
Green	EI 90	EI 120
Yellow	EI 60	EI 120

- Standard products no. for complete drains
- Combinable parts
- Tested products
- Not combinable parts

BLÜCHER® Drain Industrial with fire water trap

Tested according to EN 1366-3 and classified according to EN 13501-2

BLÜCHER® Drain Industrial - adjustable

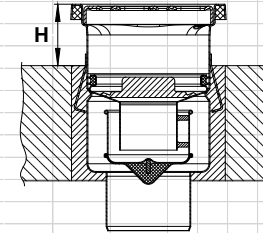
		Lower parts for industrial drains													
		Domestic			Industrial 200										
		150.300.050	150.000.075	760.002.075	760.072.075	760.002.110	760.072.110	774.002.075	774.072.075	774.002.110	774.072.110	775.002.075	775.072.075	775.002.110	775.072.110
502.052.110 FS	710.402.000	No flange		710.402.075											
	326.302.000			711.402.075											
	325.302.000			712.402.075											
	710.502.000	No flange		710.502.075											
	326.302.000														
	325.302.000														
	710.602.000	No flange		710.602.075											
	326.302.000														
	325.302.000														
	774561000														
	774551000														
	774461000														
774451000															
Frame 200	774.402.000	No flange		740.402.075	740.402.110		774.402.075	774.402.110		775.402.075	775.402.110				
	777.002.000														
	779.002.000														
	774.502.000	No flange													
	777.002.000														
	779.002.000														
	774.602.000	No flange													
	777.002.000														
	779.002.000														
	774.412.000	No flange		740.412.075	740.412.110		774.412.075	774.412.110		775.412.075	775.412.110				
	777.002.000														
	779.002.000														
774.512.000	No flange														
777.002.000															
779.002.000															
774.612.000	No flange														
777.002.000															
779.002.000															
774.422.000	No flange														
777.002.000															
779.002.000															
774562000															
774552000															
774462000															
774452000															
Frame 300	710.403.000	No flange		710.403.075	710.403.110		711.403.075	711.403.110		712.403.075	712.403.110				
	777.002.000														
	779.002.000														
	710.503.000	No flange		710.503.075	710.503.110										
	777.002.000														
	779.002.000														
710.603.000	No flange		710.603.075	710.603.110											
777.002.000															
779.002.000															

BLÜCHER® Drain Industrial - 1-part drain

			Type 760	Type 760 with side inlet	Type 766	Type 761	Type 767
Frame type	Frame size	Outlet dimension					
	□ 200	Ø75	760.402.075		766.402.075	761.402.075	767.402.075
		Ø110	760.402.110	760.402.110.91	766.402.110	761.402.110	767.402.110
	□ 250	Ø75	760.401.075		766.401.075		
		Ø110	760.401.110		766.401.110		
	□ 200	Ø75	760.502.075		766.502.075		
		Ø110	760.502.110		766.502.110		
	□ 200	Ø75	760.522.075				
		Ø110	760.522.110				
	□ 200	Ø75	760.602.075		766.602.075		
		Ø110	760.602.110		766.602.110		
	□ 200	Ø75			766.462.110		
		Ø110	760.462.110		766.462.110		
	□ 200	Ø75			766.562.110		
		Ø110	760.562.110		766.562.110		
	□ 200	Ø75			766.452.110		
		Ø110	760.452.110		766.452.110		
	□ 200	Ø75			766.552.110		
		Ø110	760.552.110		766.552.110		

Fire classes and installation heights = H:

	40mm	80mm
	EI 120	EI 120
	EI 60	EI 90
	EI 45	EI 90



- Standard products no. for complete drains
- Combinable parts
- Tested products
- Not combinable parts

